

[Home](#) | [Login](#) | [Logout](#) | [Access Information](#) | [Help](#)

Welcome United States Patent and Trademark Office

AbstractPlus

BROWSE

SEARCH

IEEE Xplore GUIDE

[View Search Results](#) | [Previous Article](#) | [Next Article](#) e-mail alert

Access this document



Full Text: PDF (456 KB)

Download this citation

Choose

Citation

## Combining data compression and encryption

Finnila, C.

C.A. Finnila Consulting, Manhattan Beach, CA, USA;

Download [EndNote, ProCite, RefMan](#)

This paper appears in: WESCON/94. 'Idea/Microelectronics'. Conference Record

Publication Date: 27-29 Sept. 1994

On page(s): 404 - 409

Meeting Date: 09/27/1994 - 09/29/1994

Location: Anaheim , CA

INSPEC Accession Number:4956281

Digital Object Identifier: 10.1109/WESCON.1994.403564

Posted online: 2002-08-06 19:09:40.0

» [Learn More](#)

Rights &amp; Permissions

» [Learn More](#)

### Abstract

As data communication becomes more pervasive and complex and the use of digital data spread, data security becomes a wider, more complex and more important problem. Encryption is an important tool to help improve data security. At first thought, data **compression** and data **incompatibility** because encrypted data cannot be compressed by any known **compression** algorithm. **Encryption** can be applied after **compression**, but this requires additional processing or fixed library autospophy tree network data **compression** can combine **encryption** by using a shared code key. Under appropriate conditions the **compression** ratio can be high, the **encryption** process is required for **encryption**.

### Index Terms

Inspec

#### Controlled Indexing

[cryptography](#) [data communication](#) [data compression](#) [digital communication](#)

#### Non-controlled Indexing

[data communication](#) [data compression](#) [data encryption](#) [data security](#) [digital communication](#)  
[library autospophy tree network](#) [library code key](#)

### Author Keywords

Not Available

### References

No references available on IEEE Xplore.

### Citing Documents

No citing documents available on IEEE Xplore.

[View Search Results](#) | [Previous Article](#) | [Next Article](#)[Help](#) [Contact Us](#) [Privacy](#)

© Copyright 2005 IEEE

Indexed by

[AbstractPlus - Print Format](#)[< Back](#)

## Combining data compression and encryption

Finnila, C.  
C.A. Finnila Consulting, Manhattan Beach, CA;

This paper appears in: **WESCON/94. 'Idea/Microelectronics'. Conference Record**

Publication Date: 27-29 Sep 1994

On page(s): 404-409

Meeting Date: 09/27/1994 - 09/29/1994

Location: Anaheim , CA, USA

ISBN: 0-7803-9992-7

References Cited: 5

INSPEC Accession Number: 4956281

DOI: 10.1109/WESCON.1994.403564

Posted online: 2002-08-06 19:09:40.0

### Abstract

As data communication becomes more pervasive and complex and the use of digital data evermore wide spread, data security becomes a wider, more complex and more important problem. Encryption can be an important tool to help improve data security. At first thought, data compression and data encryption are incompatible because encrypted data cannot be compressed by any known compression algorithms. Encryption can be applied after compression, but this requires additional processing or hardware. However, fixed library autosophy tree network data compression can combin encryption by using the library as the code key. Under appropriate conditions the compression ratio can be high, the encryption strong, and no additional processing is required for encryption

### Index Terms

#### Inspec

##### Controlled Indexing

cryptography data communication data compression digital communication

##### Non-controlled Indexing

data communication data compression data encryption data security digital data fixed library  
autosophy tree network library code key

#### Author Keywords

Not Available

### References

No references available on IEEE Xplore.

### Citing Documents

No citing documents available on IEEE Xplore.



© Copyright 2005 IEEE – All Rights Reser